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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/677,461	09/29/2000	Tom L. Bogart	042390.P9019	1603

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EXAMINER

KIANERSI, MITRA

ART UNIT

PAPER NUMBER

2145

DATE MAILED: 11/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/677,461

Applicant(s)

BOGART ET AL.

Examiner

mitra kianersi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

Applicant's arguments filed 07/09/2004 have been fully considered but they are not persuasive.

Applicant on page 9, line 11 argues that the transmission protocols are not used for retransmission purposes or even for transmitting the same data to different recipient devices. Kalwitz on col 30, lines 46, discloses that it is possible for both the Novell operating system and the UNIX operating system to use the same frame packet type; it is the operating system protocols (SPX/IPX for Novell and TCP/IP for UNIX), which determine which one of the operating systems in a multiprotocol environment is currently communicating on the LAN bus.

Applicant on page 10, lines 1-2 argues that PRESCAN module as disclosed by Kalwitz determines the protocol to be used for a single transmission to a printer. Kalwitz on col 31, lines 33-46, discloses that once knowledge of the frame packet types being used by each of the operating systems in the multiprotocol environment has been obtained, the Novell-compatible network application programs 327, such as CPSEVER, and the UNIX-compatible network application programs 337, such as CLPR, can both communicate on the LAN bus 6. The two application programs 327 and 337 also communicate with each other as illustrated schematically by signaling line 340. Using signaling line 340, which may be implemented as a control register stored in DRAM which is commonly accessed by programs 327 and 337, programs 327 and 337 can communicate with each other so as to signal that one of them has seized exclusive control over printer 4 or to signal that one of them has a pending request for use of printer 4. Kalwitz also on col 30, lines 54-60, argues that when Novell-compatible and UNIX-compatible systems comprise the multiprotocol environment, then PRESCAN simultaneously binds through LSL to all four frame packet types for an SPX/IPX protocol tower, so as to determine the frame packet type in accordance with the data group returned from LSL which has the proper IPX header.

Applicant on page 10, line 19 argues that Willis discloses transmission using a multicast protocol and retransmission using the same multicast protocol.

Willis on col 8, Table 2, discloses the "Downstream Routers GRE Tunneling" which is a Multicast network term and Tunneling protocol developed by Cisco that can encapsulate a wide variety of protocol packet types inside IP tunnels, creating a virtual point-to-point link to Cisco routers at remote points over an IP internet. By connecting multiprotocol subnetworks in a single-protocol backbone environment, IP tunneling using GRE allows network expansion across a single-protocol backbone environment. Applicant on page 11, line 18 argues that no combination of Klavitz and Willis can teach or suggest the claimed invention. Willis on col 3, lines 46-65 disclose that when data compression is used, the increasingly multimedia nature of applications requires high bandwidth support of a one-to-many information flow. And even many non-multimedia applications require high bandwidth for the timely transfer of large files of information. The concept of multicasting was originally developed to provide application and inter-network services in response to a demand for high bandwidth one-to-many services. Multicasting utilizes the natural broadcast capabilities of a satellite infrastructure, while smoothly integrating with existing and emerging terrestrial data network services and pull oriented application services. A solution to the problems of transmitting multimedia data and supporting call processing across the economical Internet while utilizing the high throughput of orbital satellites would integrate the Internet and satellites into a hybrid telecommunications system using multicasting client/server technologies.

Claims 1-29 have been examined.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject

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matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willis et al. (US 6,385,647) and further in view of Kalwitz et al. (US 5,784,622).

1. As to claim 1, Willis et al. discloses a method comprising:

- transmitting data over a network using a first network protocol from a host electronic system to one or more target electronic systems; (Abstract, lines 3-8)
- determining data not received by at least one of the target electronic systems;
- requesting from the host electronic system, be transmitted using the first network protocol (the receiving facility will examine the status of the transmission and if the transmission was unsuccessful, the receiving facility will transmit information indicating an error status to the source, and the source will respond by transmitting the multicast data again, thus providing reliable data delivery. col 4, lines 36-40)

Willis et al. does not explicitly teach when the data not received by at least one of the target electronic systems using a second network protocol.

However, Kalwitz et al. teach a multiprotocol operation of a networked peripheral Where the first and second servers are linked to their respective operating systems across the local area network through respective first and second protocol stacks operating on the interactive network board and, if desired, the first and second servers may be multitasked by a non-preemptive multitasking monitor. (Col 2, lines 28-34) Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a second network protocol with Willis et al. method of transmitting data to improve scalability and economy through the use of the industry standard non-proprietary software transport mechanism (IP) at the receiving facility.

2. As per claim 2, wherein the first network protocol is a non-reliable network protocol. (multicast routing protocol is used which is an unreliable network protocol, Table 1. Willis et al.)

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3. As per claim 3, wherein the non-reliable network protocol comprises one of a broadcast protocol and a multicast protocol. (col 3, lines 55-58, Willis et al.)
4. As per claim 4, wherein the second network protocol is a reliable network protocol. (col 4, lines 41-42, Willis et al.)
5. As per claim 5, wherein determining data not received by at least one of the target electronic systems further comprises logging, with a checkpoint (checksum 345, Willis et al.) management service, packets of data received by the target electronic systems. (Fig.10), (col 16, lines 57-67) and (col 17, lines 1-13, Willis)
6. Claims 6-9, recite similar limitations as claim 1-4. They are analyzed and rejected by the same rationale.
7. As per claim 10, wherein the sequences of instructions that cause the one or more electronic systems to determine data not received by at least one of the target electronic systems further comprise sequences of instructions that, when executed, cause the one or more electronic systems to log, with a checkpoint management service, packets of data received by the target electronic systems. (Processor or chip in a computer that carries out all the instructions of a program, Table 3 and col 9, lines 7-10, Willis et al.)
8. Claims 11-13 recite similar limitations as claim 1-3. They are analyzed and rejected by the same rationale.
9. Claim 14 recites similar limitations as claim 10. It is analyzed and rejected by the same rationale.
10. Claim 15 recites similar limitations as claim 4. It is analyzed and rejected by the same rationale.
11. As per claim 16, a method comprising: transmitting a predetermined set of data using a first network protocol to multiple target systems; (col 4, lines 48-51, Willis et al.) receiving one or more requests from at least one target system for subsets of data from the predetermined set of data; transmitting the subsets of data to at least one target system using a second network protocol. (Kalwitz et al. Col 17, lines 2-6)
12. As per claim 17, wherein transmitting a predetermined set of data

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using a first network protocol to multiple target systems comprises logging transmitted packets of data with a checkpoint management service for one or more of the target systems. (Via Checksum verification, col 23, line 19, Kalwitz et al.)

13. Claims 18-19 recite similar limitations as claims 2 and 4. They are analyzed and rejected by the same rationale.

14. Claims 20-23 recite similar limitations as claims 16-19. They are analyzed and rejected by the same rationale.

15. As per claim 24, a method comprising receiving at least a portion of a predetermined set of data from a host system using a first network protocol; loading at least some of the modules from the binary file, col 21, lines 65-67) generating one or more requests from for subsets of data from the predetermined set of data; receiving the subsets of data from the host system using a second network protocol. (processing unit generates a first address in the memory to cause a first bit to be in a predetermined state in response to the I/O signal, col 22, lines 16-18, Kalwitz et al.)

16. Claims 25-29 recite similar limitations as claims 22-26. They are analyzed and rejected by the same rationale.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mitra Kianersi whose telephone number is (571) 272-3915. The examiner can normally be reached on 7:00AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mitra Kianersi

Nov/05/2004



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